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EFL learners' creative thinking and their achievement emotions

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Abstract

The focus on learners' emotions and thoughts is believed to train learners not only in their learning area but also help them acquire other essential life skills such as creativity. Such skills are needed for the students to develop a strong personality and an effective communication. Nelson and Low (2005) emphasize the importance of understanding emotional mind in order to develop such abilities in students that facilitate constructive thinking and wise action. Also, achievement emotions are defined as emotions that are directly linked to achievement activities or achievement outcomes. Previous studies on achievement emotions have focused on emotions related to achievement outcomes, including both prospective outcome emotions. This study has tried to analyse and review the existing literature in the area and compare the different sources of creativity and solutions to enhance emotion achievement in different academic settings as well as how these variables are likely to be correlated. The evaluation of some articles (e.g. Pekrun, 2006; Pekrun et al., 2010) showed that activity emotions pertaining to current achievement-related activities are also considered as achievement emotions. Examples are students' enjoyment of learning, boredom experienced during classroom instruction, or anger at the task demands of academic learning.

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Keywords: Creative thinking; Achievement Emotion; Language Proficiency

1. Introduction

Learners usually experience different emotions in their journey of academic learning. These emotions which are likely to be both positive and negative lead to positive and negative learning performances. As the emotions vary in their nature and root, their contribution to learning and academic achievement differs. Positive emotions include: joy, enthusiasm, hope, relief, pride, gratitude, and admiration while negative emotions may include: sadness, anger, anxiety, hopelessness, shame and guilt, disappointment, boredom, envy, contempt and surprise., It is assumed the overall influence of emotions depend on the interaction of some mechanisms including cognitive and

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psychological/motivational mechanisms. Studying learners' emotions and thoughts will help improve them not only in their learning task but also help them acquire other essential life skills such as creativity. Such life skills are required for the students to develop a strong personality and an effective communication. Nelson and Low (2005) emphasize the importance of understanding emotional mind in order to develop such abilities in students that facilitate constructive thinking and wise action.

1.1. Achievement Emotions

Achievement emotions refer to the emotions that are directly linked to achievement activities or achievement outcomes. Although there are numerous definitions of emotions, most contain some or all of the following components (Parkinson, 1995): Cognition (e.g. appraisal, evaluation); internal reaction (e.g. heart rate); overt behaviour (e.g. approach, avoidance); facial expression (e.g. frown, smile); a goal structure (e.g. loss, anger). Existing literature indicates that many areas of psychology have recently rediscovered affect (e.g. Clark, 1992; Parkinson, Totterdell, Briner, & Reynolds, 1996; Watson & Tellegen, 1985). Viewed from an evolutionary perspective, emotions are supposed to help enable higher organisms to react quickly, strongly, and in a flexible way, to situations which are important for adaptation and survival (Plutchik, 1980). Recently, toward the end of twentieth century, we are observing a shift of attention from behavioral approaches and cognitive processes to the affective factors.

Based on the taxonomy provided by Warr (1987), there are three categories of emotions described. First, emotions can generally be ordered according to their predominant, subjectively experienced value (positive vs. negative). Second, emotions can be classified as being of either a more task-related or a more social nature (of course, many emotions may imply both task related and social facets). Thirdly, task-related emotions may differ according to the task- and outcome-related time perspective they imply, by being process-related (on-task), prospective (pre-task, pre-outcome), or retrospective (post-task, post-outcome). First, emotions may be assumed to function as human reactions to important events. Second, settings of learning and achievement can be of an individual or a social nature (such as learning alone at home vs. classroom instruction). Therefore, such settings may be assumed to induce a variety both of self- and task-related emotions, and of social emotions. In recent years, the empirical as well as theoretical evidence has been provided showing diversity of students' emotions (e.g. Covington, 1985;PekNn, 1991; Weiner, 1985).

In recent years, the results obtained from empirical research have supported the fact that pleasant emotions (e.g., enjoyment, pride) are positively related to achievement whereas unpleasant emotions (e.g., anxiety, boredom) are negatively related (Pekrun, 2006). Concerning the strength of discrete emotions/achievement relations, recent studies indicate differences with respect to emotion type and academic domain. Goetz et al. (2012; grades 8/11) found the mean and median within-domain relation between discrete c1assroom-related emotions (enjoyment, pride, anxiety, anger, boredom) and grades in multiple subject domains (mathematics, physics, German, English) to be 1.251 (range = .04 to .40; SD = .08). These values are consistent with related studies on emotion/ achievement relations in high-school and university students (e.g., Goetz, Cronjaeger, Frenzel, & Lüdtke, 2010; Goetz, Frenzel, Hall, & Pekrun, 2008; Goetz, Frenzel, Pekrun, Hall, & Lüdtke, 2007; Pekrun, Elliot, & Maier, 2009; Pekrun, Goetz, Daniels, Stupnisky, & Perry, 2010).

In social-cognitive model introduced by Pekrun, Frenzel, Goetz, and Perry (2007), emotionl achievement relations are assumed to be mediated by cognitive resources, motivation, strategy use, and self-regulated learning such that specific emotions impact these variables that, in turn, predict achievement outcomes. Based on these dimensions, there are four groups of emotions identified : positive activating emotions (e.g., enjoyment, hope, pride, gratitude); positive deactivating emotions (e.g., relaxation, contentment, relief); negative activating emotions (e.g., anger, frustration, anxiety, shame); and negative deactivating emotions (e.g., boredom, sadness, disappointment, hopelessness). In most conditions, it is assumed that positive activating emotions exert positive effects on achievement whereas negative deactivating emotions exert negative effects, in contrast to positive deactivating and negative activating emotions that are assumed to have ambivalent effects on motivation and cognitive processing (Pekrun, 2006).

Research on test anxiety and achievement relations suggests additional moderating variables (Zeidner, 1998, 2007), inc1uding those that increase these relations (e.g., evaluative settings, negative feedback) and decrease these relations (e.g., structured conditions, social support). Although often cited as a possible moderator, gender has not been found to substantially moderate anxiety/achievement relations (Zeidner, 1998, 2007). Empirical findings concerning gender effects on discrete emotional achievement relations are presently lacking. With respect to causal ordering, it is important to note that reciprocal relations between emotions and achievement can also be assumed (Pekrun et al., 2002a; for test anxiety, see Zeidner, 1998, 2007). More specifically, achievement can impact emotions (e.g., good grades predict enjoyment) directly or via acadernic self-concept (e.g., good grades predict perceived competence which predicts enjoyment; Goetz, Frenzel, Hall, & Pekrun, 2008).

The magnitude of the relationship between emotional achievements appears to be weak to moderate (Marsh & Craven, 2006). However, even weak relationship between achievement emotions and academic achievement can leave long lasting effects on students' achievement in long term. According to Pekrun, Goetz, Titz, and Perry (2002b), positive emotions "help to envision goals and challenges, open the mind to thoughts and problem-solving, protect health by fostering resiliency, create attachments to significant others, lay the groundwork for individual self-regulation, and guide the behavior of groups, social systems, and nations" (p. 149).

With the exception of extensive research on test anxiety since the 1950s (Sarason & Mandler, 1952; Zeidner, 2007) and on emotions in achievement settings based on attribution theory (Weiner, 1985), empirical educational research has largely neglected students' emotions. Over the past decade, however, a discernible increase in theoretical and empirical contributions on emotions in education is reflected in numerous special issues and edited volumes (Efklides & Volet, 2005; Linnenbrink, 2006; Linnenbrink-Garcia & Pekrun, 2011; Lipnevich & Roberts, 2012; Schutz & Lanehart, 2002; Schutz & Pekrun, 2007). Nonetheless, with the exception of research on anxiety/achievement relations (e.g., Hembree, 1988; Ma, 1999; Seipp, 1991), there exist only scattered empirical findings on relations between other emotions and academic achievement (Pekrun, 2006). This lack of emphasis is reflected in arecent PsychINFO search (January 2011) for manuscript titles inc1uding "achievement" and "anxiety" (532) as compared to "enjoyment" (10), "hope" (14), "pride" (7), "anger" (8), "shame" (8), or "boredom" (3). In contrast to 1,015 titles inc1uding "achievement" and "self-concept," the relatively small number of publications in the field of emotions as compared to self-concept research is c1early evident. Hence, there is an immense need for these emotions to be taken into account by both teachers and teacher trainers; so that some measures be implemented in order to know and control students' emotions and consequently, improve the overall achievement of the learners.

1.2. Creative thinking and academic achievement

Creativity is defined as the ability "to produce work that is both novel (i.e., original, unexpected) and appropriate (i.e., useful, adaptive concerning task constraints)" (Sternberg and Lubart, 1999, p. 3). Creativity is not only a personality trait; it is also affected by situational factors, such as task characteristics, or expected gratifications or motivational variables (Förster, Friedman, and Liberman, 2004). Creative thinking process includes defining, researching, ideating, verifying and evaluating of which defining and researching are categorized as concrete thinking; ideating falls in abstract thinking and finally, verifying and evaluating are classified as concrete thinking . Numerous recent research has been conducted on the subject of creativity (Charlton, 2009; Heinze, Shapira, Rogers, & Senker, 2009; Ivcevic, 2009; Miller, 2007; Runco, 2007a, 2007b; Simonton & James, 2007; Yusuf, 2009) in relation to academic achievement (Deary et al., 2007; Lau & Roeser, 2008; Noftle & Robins, 2007; Steinmayr & Spinath, 2009), creativity and academic achievement (Ai, 1999; Coyle & Pillow, 2008;Palaniappan, 2005; Palaniappan, 2007a; Steinmayr & Spinath, 2009) academic achievement and gender (Barkatsas, Kasimatis, & Gialamas, 2009;Hosenfeld, Köller, & Baumert, 1999; Penner & Paret, 2008) as well as creativity and gender (Ai, 1999; Habibollah. et al., 2008; Naderi et al., 2008;Palaniappan, 2000, 2007b). The results show an inconsistency in research findings regarding the relationship between creativity and academic achievement. Thus creative thinking involves a shift from concrete thinking to abstract thinking and then back to concrete thinking. While some research found a relationship between creativity and academic achievement (Ai, 1999; Asha, 1980; Getzels, 1962; Karimi, 2000; Mahmodi, 1998; Marjoribanks,1976; Murphy, 1973; Yamamoto, 1964), Other researchers showed that

creativity is not related to academic achievement in any significant way. (Behroozi, 1997; Edwards, 1965; Mayhon, 1966; Nori, 2002; Tanpraphat, 1976). However, Ai (1999) referred to others who investigated this matter (Bentley, 1966; Shin, & Jacobs, 1973; Smith, 1971) and inferred that creativity was only correlated with advanced levels of academic achievement. Furthermore, research provides dissimilar results on the relationship between creativity and academic achievement between male and female learners depending on the aspect of creativity being considered. To conclude, there is empirical support for the relationship between aspects of creativity and academic achievement.

2. Conclusion

Based on a quick review through literature, it is revealed that all components of achievement emotions have not received equal attention. There seems there is still a need for some other components such as hope, relief, gratitude, admiration, hopelessness, disappointment, envy, contempt and surprise to be studied regarding their relationship with academic achievement and learners' creativity. As most research on emotion/achievement relations has focused on testing situations (i.e., anxiety) and the classroom setting, future studies on homework-related emotions remain relatively unexplored and may yield intriguing findings (Dettmers et al., 2011). Moreover, further empirical research (e.g., longitudinal, experimental, intervention designs) is recommended to examine causal relationship between different components of emotion and achievement. Besides students' emotion, teachers' emotion need to be considered too. Teachers should also be aware of their own emotional experiences and attempt to optimize their emotions concerning instruction so as to promote students' emotions and achievement (Frenzel et al., 2009; Schutz & Zembylas, 2009). Finally, teachers should acknowledge their potential to impact students' emotions and attempt to foster pleasant and reduce negative emotions; for example, by enhancing students' academic self-concept (Goetz et al., 2008), adopting an enthusiastic teaching style (Frenzel, Goetz, Lüdke, Pekrun, & Sutton, 2009), or fostering students' emotion regulation competencies (e.g., for coping with test anxiety, see Zeidner, 1998,2007; for coping with boredom, see Nett, Goetz, & Hall, 2011).

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